

**NATIONAL ASSESSMENT OF  
EDUCATIONAL PROGRESS (NAEP)**

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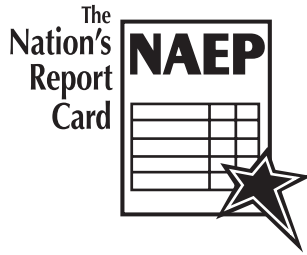
# **DEMONSTRATION BOOKLET**

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**2005  
READING, MATHEMATICS,  
AND SCIENCE**

**GRADE 4**





**2005**  
**Grade 4**

## SECTION

1	R8
2	R9
3	D1
4	RB1

**BOOK**  
**R6**

## School and Teacher Information

SCHOOL #

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TEACHER #

--	--

TOTAL TIME for  
ACCOMMODATION

--	--	--

ADMIN  
CODE

--	--

## ACCOMMODATIONS

- |      |     |
|------|-----|
| none | (N) |
| 71   | (Y) |
| 72   | (Y) |
| 73   | (Y) |
| 74   | (Y) |
| 75   | (Y) |
| 76   | (Y) |
| 77   | (Y) |
| 78   | (Y) |
| 79   | (Y) |
| 80   | (Y) |
| 81   | (Y) |
| 82   | (Y) |

PLACE LABEL HERE

DO NOT USE

0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

# **NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS 2005 DEMONSTRATION BOOKLET**

## **TABLE OF CONTENTS**

About This Demonstration Booklet .....	4
The Reading Assessment .....	5
Description .....	5
Reading Booklet Directions .....	6
Sample Reading Questions: Grade 4 .....	8
The Mathematics Assessment .....	15
Description .....	15
Mathematics Booklet Directions .....	16
Sample Mathematics Questions: Grade 4 .....	17
The Science Assessment .....	19
Description .....	19
Science Booklet Directions .....	20
Sample Science Questions: Grade 4 .....	22
The Student Background Questionnaire .....	24
General Directions for Grade 4 .....	24
Student Background Questionnaire .....	25
Reading Background Questionnaire .....	28
Mathematics Background Questionnaire .....	32
Science Background Questionnaire .....	34
Information About National Assessment of Educational Progress .....	Back Cover

## ABOUT THIS DEMONSTRATION BOOKLET

On behalf of the National Assessment of Educational Progress (NAEP) project team, I want to thank you and other members of your school system for agreeing to participate in the NAEP assessment. Your participation is essential and highly valued. The data that NAEP provides about student achievement are widely used by policymakers, educators, and researchers throughout the nation.

Since 1969, NAEP assessments have been conducted periodically in reading, mathematics, science, writing, U.S. history, civics, geography, and the arts. In 2005, NAEP will conduct operational tests in reading, mathematics, and science at grades 4, 8, and 12.

The assessment will require about 90–100 minutes of a student's time. Each participating student will receive a reading, mathematics, or science booklet. The booklet will include two 25-minute sections of test questions and a brief background questionnaire that asks students about their experience with reading, mathematics, or science. Students' answers to all questions are confidential and student names are removed from all completed assessment materials.

This demonstration booklet describes the 2005 assessments. The first three sections explain the purposes and content of the NAEP reading, mathematics, and science assessments and provide sample test questions at each grade level. The fourth section includes the directions and the background questions that all students will be asked to answer. The final part of the booklet, located on the back cover, presents general information about the NAEP program.

The sample questions included in this booklet are intended to convey the kinds of questions and question formats that compose the 2005 assessments. All released questions from previous NAEP assessments are available to be viewed and downloaded from the NAEP web site at <http://nces.ed.gov/nationsreportcard>. The actual questions in the assessment must be safeguarded to maintain the integrity of the assessment and resulting data, but members of the public may request access to secure NAEP questions. Information on how to make such a request is included on the back page of this booklet.

If you have any questions or comments regarding the NAEP program or this booklet, please refer to the NAEP web site at <http://nces.ed.gov/nationsreportcard> or call Sherran Osborne of the National Center for Education Statistics at 202–502–7420.

Peggy G. Carr, Associate Commissioner  
Education Assessment  
National Center for Education Statistics

# THE READING ASSESSMENT

The NAEP reading assessment measures students’ ability to understand, to interpret, and to think critically about different types of texts. Recognizing that readers vary their approach according to the demands of different types of text, the NAEP framework specifies the assessment of reading in three contexts: *reading for literary experience*, *reading to gain information*, and *reading to perform a task*. (Reading to perform a task is not assessed at Grade 4.) The assessment comprises reading materials selected from publications and other resources typically available to students in and out of school.

Across the three contexts for reading, students are asked to demonstrate their understanding by responding to comprehension questions that reflect four different approaches to understanding text. The NAEP framework accounts for these different approaches by specifying four aspects of reading that represent the types of comprehension questions asked of students. *Forming a general understanding* questions ask students to consider the text as a whole. *Developing an interpretation* questions ask students to discern connections and relationships within the text. *Making reader/text connections* questions ask students to connect information from the text with prior knowledge and experience. *Examining content and structure* questions ask students to critically evaluate the content, organization, and form of the text. All four aspects of reading are assessed at all three grades within the contexts for reading described above.

The NAEP reading assessment contains multiple-choice questions, as well as short and extended constructed-response questions. Students spend approximately 50 to 60 percent of their assessment time providing written answers to constructed-response questions.

Distribution of Percentage of Assessment Time Across Contexts for Reading in the NAEP Reading Framework

Literary	Informative	Task
55%	45%	Not assessed

## READING BOOKLET DIRECTIONS

In each of the next two sections, you will have 25 minutes to read a story, an article, or a document and answer questions about it. You should think carefully about your answers, and you should use the entire 25 minutes to complete each section.

You will be asked to respond to three different types of questions. Some of the questions will require you to choose the best answer and fill in the oval for that answer in your booklet.

For other questions, you will be asked to write short answers on the blank lines provided in your booklet. Here is an example of a question that requires you to provide a short answer.

### Example 1

Give an example from the article that shows Mandy was not a quitter.

*One example is that Mandy's mother didn't want her to umpire in public, but Mandy persuaded her mother to let her.*

Also, you may be asked to answer other questions by writing longer, more detailed responses on a full page of blank lines. For example, here is a question that requires you to provide a longer answer.

**Example 2**

Explain how Mandy's mother and brother helped Mandy to become the first women umpire.

Mandy's mother helped her by agreeing to let her umpire at a public ball game. Mandy did so well that the team offered her a job as umpire. Mandy's brother helped her by letting her play baseball with him. He also helped Mandy to persuade their mother to let her play in public.

When you are asked to write your response be sure that your handwriting is clear. Think carefully about each question and make your answers as complete as possible, using as many lines as you need.

You may go back to the story, article, or document when answering any of the questions. If you finish before time is called, be sure to read your work again and change anything that you think will make your answers better.



**SAMPLE READING QUESTIONS****GRADE 4**

# WATCH OUT FOR WOMBATS!

**A**S WE RODE ALONG THE HIGHWAY sixty miles northeast of Adelaide, Australia, a diamond-shaped sign suddenly loomed ahead. *Watch Out for Wombats*, it warned. We peered into the sparse scrub along the roadside and searched for the brown furry animals. In the distance we spotted a mob of red kangaroos bouncing out of sight, and near the road a crowlike bird called a currawong was perched, but nowhere did we see any wombats. However, we later found out that this was not surprising because we were traveling during midday, and wombats are active mostly at night. It wasn't until we visited the animal reserve that we finally saw our first wombat and learned more about this funny-looking creature.

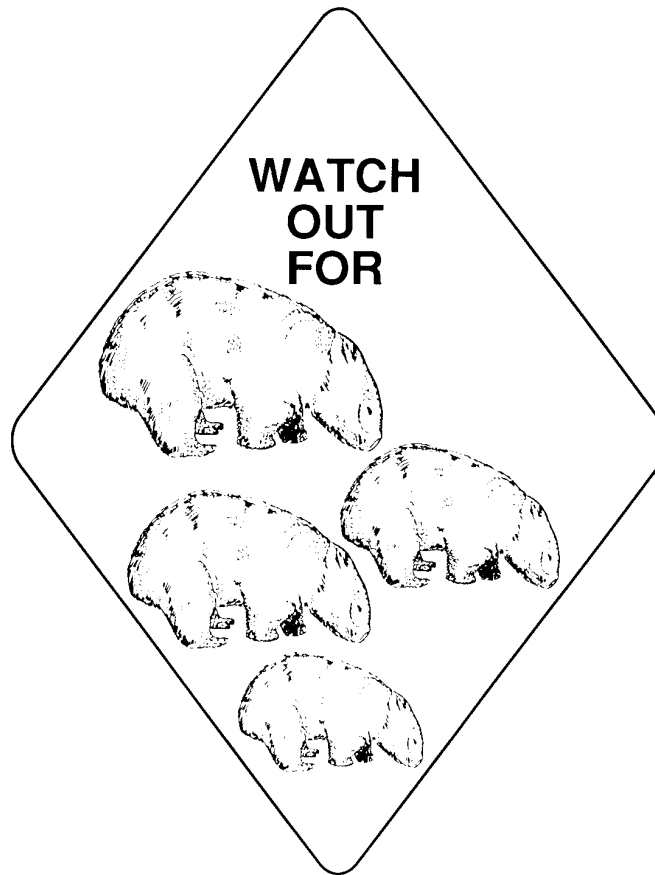
We found that there are two types of wombats in Australia: the hairy-nosed wombat, which lives in Queensland and South Australia, and the coarse-haired wombat, which lives along the southeast coast. Both have soft brown fur, short ears, and thick-set bodies. They are said to resemble North American badgers. The hairy-nosed wombat is smaller and has pointier ears compared to its coarse-haired cousin; otherwise they are very much alike.

In many ways the wombat is similar to another Australian native, the koala. Like koalas, wombats have strong forelimbs and powerful claws. But instead of using its claws to cling to high tree branches as the koala does, the wombat digs large

**Caroline Arnold**

**GO ON TO THE NEXT PAGE**





underground burrows. These burrows are usually nine to fifteen feet across, but they can be enormous—sometimes as long as ninety feet. One end of the burrow is used as a sleeping area—there the wombat builds a nest made of bark.

The wombat is a vegetarian, so it also uses its mighty claws to tear up grasses and roots for its food. A mother wombat will pull out single stems of grass and lay them on the ground so her young wombat can eat the tender bases. The wombat's teeth, which grow throughout its

life, are sharp and ideal for cutting and tearing.

When a mother wombat gives birth, she never has to worry about finding a baby-sitter—she simply carries her baby along with her. Like most mammals in Australia, wombats are marsupials. A baby wombat is born at a very early stage of development and lives in its mother's pouch until it is old enough to survive on its own.

Wombats have only one baby at a time, usually during the Australian winter months, May to July. A baby wombat is called a joey. At birth the

tiny joey—barely an inch long—uses its forelimbs to pull itself along its mother’s underside to get into her pouch, where it will be kept warm, protected, and fed.

Marsupials, like all mammals, are nourished by their mothers’ milk. The nipples that supply the milk are inside the pouch. Once inside, the wombat joey finds a nipple and grabs it. The nipple then swells up in the baby’s mouth, providing a firm hold and a steady supply of food. The joey stays in its mother’s pouch for the next four months and grows rapidly.

Most marsupials have pouches which open upward when the animal is standing. However, both koalas and wombats have pouches which face downwards. A strong muscle keeps the pouch tightly closed and

prevents the young wombat or koala from falling out. An advantage of the downward-opening pouch for wombats is that dirt is less likely to get inside when the wombat is burrowing.

The wombat is a shy and gentle animal. But even if you lived in Australia and were willing to keep watch during the nighttime hours, it would be difficult to get to know one. As more and more people move into territories in which wombats live, they destroy the wombat’s burrows and food supplies. In some areas where the wombat was once plentiful, it is now almost extinct. Animal reserves have been set up recently to protect the wombat. Perhaps with a little help these friendly creatures will again prosper and multiply. The next time we drive through Australia, we really may have to *Watch Out for Wombats!*

WC0000001

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1. This article mostly describes how

- Ⓐ the wombat's special body parts help it to grow and live
- Ⓑ highway signs help to save the wombat
- Ⓒ the wombat is like the koala and the North American badger
- Ⓓ wombats feed and raise their young

WO000002

2. Where do wombats live?

- Ⓐ North America
- Ⓑ Greenland
- Ⓒ Australia
- Ⓓ Africa

WO000004

3. Describe one way in which wombats and koalas are similar and one way in which they are different.

WO000005

Similar

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Different

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GO ON TO THE NEXT PAGE

4. Use the information in this passage to describe marsupials.

WO000006

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5. Where do wombats usually live?

- ☐ Ⓐ Along highways
- ☐ Ⓑ Inside tree trunks
- ☐ Ⓒ On high tree branches
- ☐ Ⓓ In underground burrows

WO000007

6. Choose an animal, other than a koala, that you know about and compare it to the wombat.

WO000008

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GO ON TO THE NEXT PAGE

7. Why are wombats not often seen by people?

- Ⓐ Wombats look too much like koalas.
- Ⓑ Wombats usually are active at night.
- Ⓒ There are not enough wombat-crossing signs.
- Ⓓ Wombats are difficult to see in trees.

WO000009

8. Describe the sleeping area of wombats.

WO000011

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9. To get food, the wombat uses its

- Ⓐ nose
- Ⓑ ears
- Ⓒ claws
- Ⓓ pouch

WO000012

GO ON TO THE NEXT PAGE

10. What would a wombat probably do if it met a person?

- Ⓐ Try to attack the person.
- Ⓑ Run away from the person.
- Ⓒ Growl at the person.
- Ⓓ Beg for food from the person.

WO000013

11. Why has Australia set up animal reserves to protect the wombat?

WO000014

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12. Give two reasons why people should not have wombats as pets. Use what you learned in the passage to support your answer.

WO000015

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## THE MATHEMATICS ASSESSMENT

The NAEP mathematics assessment measures students' ability to solve problems in five mathematics content strands: Number Properties and Operations; Measurement; Geometry; Data Analysis and Probability; and Algebra. Within each of these five content strands, students are asked questions that involve low, moderate, and high mathematical complexity.

The NAEP mathematics assessment includes multiple-choice questions, short-answer constructed-response questions, and extended constructed-response questions. The extended exercises allow students to communicate their ideas and demonstrate the reasoning they used to solve problems. The short-answer and extended-response questions make up approximately 50 percent of student assessment time. The assessment also incorporates the use of calculators (at all grades), rulers (at all grades), protractors (at grades 8 and 12), and ancillary materials such as spinners and geometric shapes in some parts of the assessment, but not all.

Calculator use is permitted on approximately one-third of the test questions (four-function calculators at Grade 4, scientific calculators at grade 8, and scientific or graphing calculators at Grade 12). At grades 4 and 8, NAEP provides calculators for all students. At Grade 12, students may use their own scientific or graphing calculators.

### Distribution of Percentage of Assessment Questions Across Content Strands in the NAEP Mathematics Framework

Number Properties and Operations	40%
Measurement	20%
Geometry	15%
Data Analysis and Probability	10%
Algebra	15%

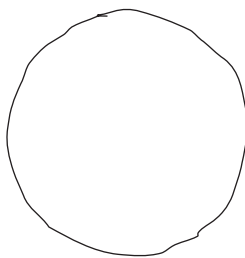
## MATHEMATICS BOOKLET DIRECTIONS

This assessment uses many different booklets. Each booklet has different questions. Do not worry if the person next to you is working on questions that do not look like those you are working on.

Read each question carefully and answer it as well as you can. Do not spend too much time on any one question.

For some of the questions you may need to write or draw the answer. You can see how this is done in the example below.

Draw a circle in the space below.



You may be given a calculator to use for at least one part of your booklet. If you are given a calculator, you will have to decide when to use it in each section where its use is permitted. For some questions using the calculator is helpful, but for other questions the calculator may not be helpful. After each question you will be asked to indicate whether you used the calculator.

When you receive the calculator, make sure you know how to use it. There are instructions on the back cover of this booklet to help you. If the calculator does not work or if you do not know how to use it, raise your hand and ask for help.

### REMEMBER:

Read each question CAREFULLY.

Fill in only ONE OVAL for each question or write your answer in the space provided.

If you change your answer, ERASE your first answer COMPLETELY.

CHECK OVER your work if you finish a section early.

Do not go past the  sign at the end of each section until you are told to do so.

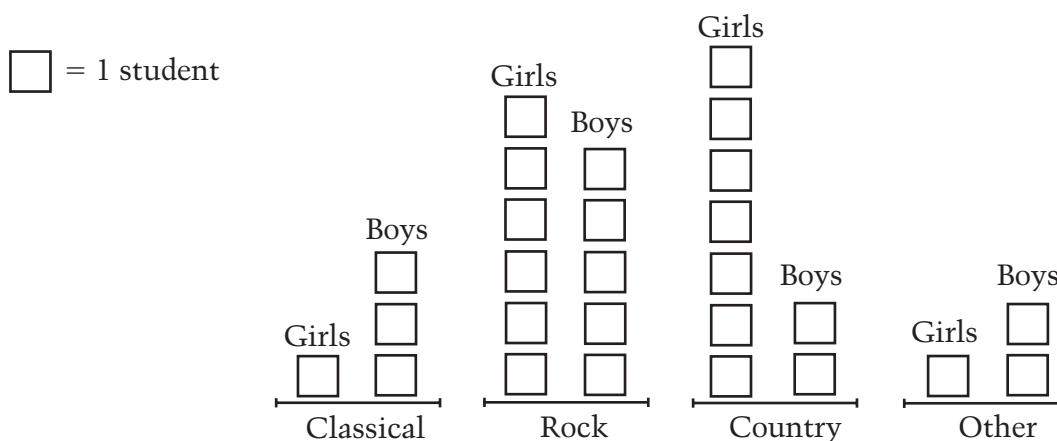




# SAMPLE MATHEMATICS QUESTIONS

## GRADE 4

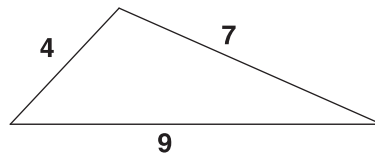
1. Each boy and girl in the class voted for his or her favorite kind of music. Here are the results.



Which kind of music did most students in the class prefer?

- Ⓐ Classical
- Ⓑ Rock
- Ⓒ Country
- Ⓓ Other

2. Sam can purchase his lunch at school. Each day he wants to have juice that costs 50¢, a sandwich that costs 90¢, and fruit that costs 35¢. His mother has only \$1.00 bills. What is the least number of \$1.00 bills that his mother should give him so he will have enough money to buy lunch for 5 days?
- 



3. If both the square and the triangle above have the same perimeter, what is the length of each side of the square?



## THE SCIENCE ASSESSMENT

The NAEP science assessment is organized according to a content-by-process matrix. The content area consists of three fields of science: earth science, life science, and physical science. The three process categories (knowing and doing) are conceptual understanding, scientific investigation, and practical reasoning. In addition, there are two overarching domains that describe science, nature of science, and themes.

The 2005 NAEP assessment in science for Grade 4 contains multiple-choice questions, as well as short and extended constructed-response exercises. At least 50% of the assessment time is devoted to constructed-response exercises. These questions measure students' knowledge of facts, ability to integrate this knowledge into larger constructs, and the capacity to use the tools, procedures, and reasoning processes of science to develop an increased understanding of the natural world.

### Distribution of Percentage of Assessment Time Across Fields of Science in the NAEP Science Framework

<b>Earth Science</b> includes solid Earth, water, air, and Earth in space	<b>Physical Science</b> includes matter, energy, and motion	<b>Life Science</b> includes change and evolution, cells, organisms, and ecology
33%	33%	33%

## SCIENCE BOOKLET DIRECTIONS

In each of sections 1 and 2, you will have 25 minutes to answer a series of questions about science.

You will be asked to respond to several different types of questions. Some of the questions will require you to choose the best answer and fill in the oval for that answer in your booklet. On questions like this, be sure to mark your answers clearly and darken the oval completely. If you make a mistake or want to change your answer, be sure to erase any unwanted marks. Here is an example of a question that requires you to fill in an oval.

### Example 1

How hot is it on the surface of the Sun?

- ☐ Ⓐ Not quite as hot as boiling water
- ☐ Ⓑ About as hot as fire
- ☐ Ⓒ About 100°F
- ☒ Ⓓ Much hotter than almost anything on Earth

For some questions, you will be asked to write short answers on the blank lines provided in your booklet. Here is an example of a question that requires you to provide a short answer.

### Example 2

Describe one important difference between plants and animals.

*Most plants make their own food, while animals eat plants and other animals for food.*

Also, you will be asked to answer some questions by writing longer, more detailed responses. For example, here is a question that requires you to provide a longer answer.

**Example 3**

Describe three things that animals do to survive in areas that have cold winters.

*Some animals store a lot of fat so that they can go into a deep sleep all winter. Some animals grow a thick coat of fur to keep them warm. Some birds and butterflies fly away from a cold area and spend the winter in a place that is warm and has a lot of food.*

When you are asked to write your response be sure that your handwriting is clear. Think carefully about each question and make your answers as complete as possible, using as many lines as you need. If you finish a section before time is called, you may go back and check your work on that section only.

Finally, in some questions you may be asked to draw a diagram or fill in a table.

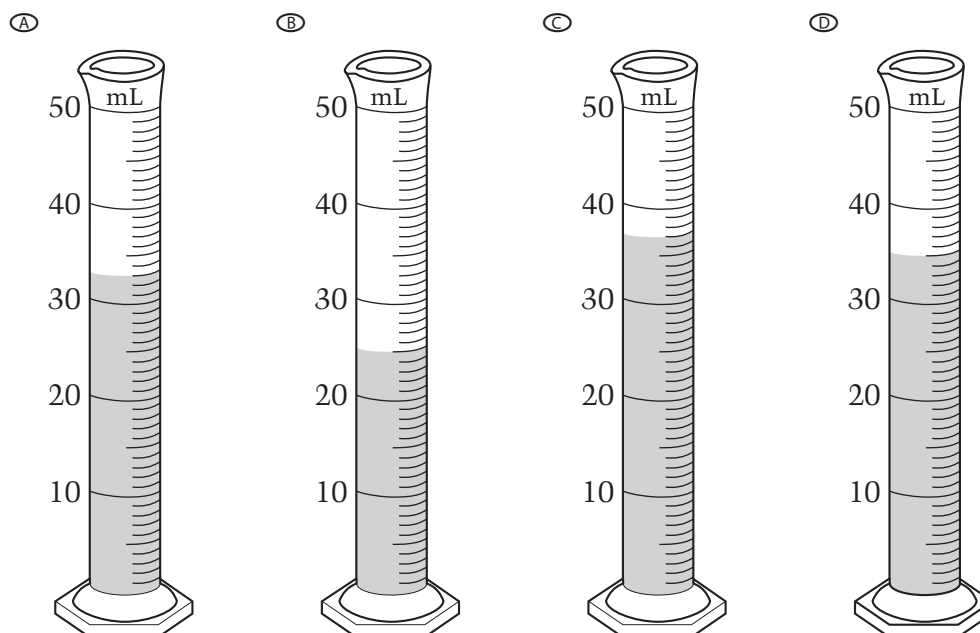


## SAMPLE SCIENCE QUESTIONS

### GRADE 4

HE001475

1. The pictures below show containers with water in them. Which container has 35 milliliters (mL) of water in it?



HE001431

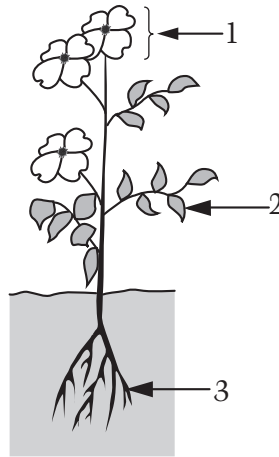
2. We can see the Moon from Earth because the Moon

- Ⓐ is so hot that it glows like the Sun
- Ⓑ reflects light from the Sun
- Ⓒ has many volcanoes that give off a glowing gas
- Ⓓ is made of rocks that give off their own light

**GO ON TO THE NEXT PAGE**

HE001777

3. Name the parts of the plant below that are labeled 1, 2, and 3. Explain the function of each part.

Name of PartFunction

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
- \_\_\_\_\_

HE001976

4. Many things are made of metal, such as pots, pans, tools, and wire. Give two reasons why metals are used to make many different things.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# STUDENT BACKGROUND QUESTIONNAIRE

## GENERAL DIRECTIONS FOR GRADE 4

In the next two sections, you will be asked questions about yourself and your education. We will read the first section together. To answer these questions, fill in the oval beside the answer that is true for you. For example, fill in the oval beside your answer to this question:

How many movies did you see last month on television and in movie theaters?

- ☐ Ⓐ None
- ☐ Ⓑ 1 to 5
- ☐ Ⓒ 6 to 10
- ☐ Ⓓ More than 10

You should have filled in the oval beside the answer that best tells how many movies you saw last month on television and in movie theaters. On questions like this, be sure to make your answer mark clear and dark in the oval. If you make a mistake or want to change your answer, be sure to completely erase any unwanted marks.

You will be told when it is time to begin and end each section.

Do not go past the  sign at the end of each section until you are told to do so.

If you finish before time is called, go back and check your work on that section only. Use your time carefully. Do as much as you can in each section.





## STUDENT BACKGROUND QUESTIONNAIRE

In this section, please tell us about yourself and your family. The section has 11 questions. Mark your answers in your booklet.

- VB331330
1. Are you Hispanic or Latino? Fill in **one or more ovals**.

- ☐ (A) No, I am not Hispanic or Latino.
- ☐ (B) Yes, I am Mexican, Mexican American, or Chicano.
- ☐ (C) Yes, I am Puerto Rican or Puerto Rican American.
- ☐ (D) Yes, I am Cuban or Cuban American.
- ☐ (E) Yes, I am from some other Hispanic or Latino background.

- VB331331
2. Which of the following best describes you? Fill in **one or more ovals**.

- ☐ (A) White
- ☐ (B) Black or African American
- ☐ (C) Asian
- ☐ (D) American Indian or Alaska Native
- ☐ (E) Native Hawaiian or other Pacific Islander

For the rest of the questions in this section, fill in only **one** oval for each question.

3. Does your family get a newspaper at least four times a week? VB331333
- ☐ (A) Yes
- ☐ (B) No
- ☐ (C) I don't know.
4. Does your family get any magazines regularly? VB331334
- ☐ (A) Yes
- ☐ (B) No
- ☐ (C) I don't know.
5. About how many books are there in your home? VB331335
- ☐ (A) Few (0–10)
- ☐ (B) Enough to fill one shelf (11–25)
- ☐ (C) Enough to fill one bookcase (26–100)
- ☐ (D) Enough to fill several bookcases (more than 100)
6. Is there a computer at home that you use? VB331336
- ☐ (A) Yes
- ☐ (B) No
7. Is there an encyclopedia in your home? It could be a set of books, or it could be on the computer. VB331337
- ☐ (A) Yes
- ☐ (B) No
- ☐ (C) I don't know.
8. About how many pages a day do you have to read in school and for homework? TB001101
- ☐ (A) 5 or fewer
- ☐ (B) 6–10
- ☐ (C) 11–15
- ☐ (D) 16–20
- ☐ (E) More than 20
9. How often do you talk about things you have studied in school with someone in your family? VB331339
- ☐ (A) Never or hardly ever
- ☐ (B) Once every few weeks
- ☐ (C) About once a week
- ☐ (D) Two or three times a week
- ☐ (E) Every day

VB331447

10. How many days were you absent from school in the last month?

- ☐ Ⓐ None
- ☐ Ⓑ 1 or 2 days
- ☐ Ⓒ 3 or 4 days
- ☐ Ⓓ 5 to 10 days
- ☐ Ⓔ More than 10 days

VB331451

11. How often do people in your home talk to each other in a language other than English?

- ☐ Ⓐ Never
- ☐ Ⓑ Once in a while
- ☐ Ⓒ About half of the time
- ☐ Ⓓ All or most of the time



# STUDENT BACKGROUND QUESTIONNAIRE

## READING—GRADE 4

This section has 22 questions. Mark your answers in your booklet. Fill in only **one** oval for each question.

1. When I read books, I learn a lot.

VB345686

- ☐ Ⓐ This is not like me.
- ☐ Ⓑ This is a little like me.
- ☐ Ⓒ This is a lot like me.

2. Reading is one of my favorite activities.

VB345687

- ☐ Ⓐ This is not like me.
- ☐ Ⓑ This is a little like me.
- ☐ Ⓒ This is a lot like me.

3. How often do you read for fun on your own time?

VB345692

- ☐ Ⓐ Never or hardly ever
- ☐ Ⓑ Once or twice a month
- ☐ Ⓒ Once or twice a week
- ☐ Ⓓ Almost every day

4. How often do you talk with your friends or family about something you have read?

VB345693

- ☐ Ⓐ Never or hardly ever
- ☐ Ⓑ Once or twice a month
- ☐ Ⓒ Once or twice a week
- ☐ Ⓓ Almost every day

5. How often do you read stories or poems for fun outside of school?

VB345699

- ☐ Ⓐ Never or hardly ever
- ☐ Ⓑ A few times a year
- ☐ Ⓒ Once or twice a month
- ☐ Ⓓ At least once a week

6. How often do you read to learn about real things (such as facts about dinosaurs or other countries) for fun outside of school?

VB345700

- ☐ Ⓐ Never or hardly ever
- ☐ Ⓑ A few times a year
- ☐ Ⓒ Once or twice a month
- ☐ Ⓓ At least once a week

GO ON TO THE NEXT PAGE

VB345701

7. How often do you read stories or articles that you find on the Internet for fun outside of school?

☐ Ⓐ Never or hardly ever  
☐ Ⓑ A few times a year  
☐ Ⓒ Once or twice a month  
☐ Ⓓ At least once a week

VB345703

8. For school this year, how often do you have a class discussion about something that the class has read?

☐ Ⓐ Never or hardly ever  
☐ Ⓑ A few times a year  
☐ Ⓒ Once or twice a month  
☐ Ⓓ At least once a week

VB345704

9. For school this year, how often do you work in pairs or small groups to talk about something that you have read?

☐ Ⓐ Never or hardly ever  
☐ Ⓑ A few times a year  
☐ Ⓒ Once or twice a month  
☐ Ⓓ At least once a week

VB345705

10. For school this year, how often do you write in a journal about something that you have read for class?

☐ Ⓐ Never or hardly ever  
☐ Ⓑ A few times a year  
☐ Ⓒ Once or twice a month  
☐ Ⓓ At least once a week

VB345707

11. So far this year, how many times have you written a book report?

☐ Ⓐ Never  
☐ Ⓑ Once  
☐ Ⓒ 2 or 3 times  
☐ Ⓓ 4 or 5 times  
☐ Ⓔ 6 or more times

VB345708

12. So far this year, how many times have you made a presentation to the class about something that you have read?

☐ Ⓐ Never  
☐ Ⓑ Once  
☐ Ⓒ 2 or 3 times  
☐ Ⓓ 4 or 5 times  
☐ Ⓔ 6 or more times

VB345709

13. So far this year, how many times have you done a school project about something that you have read (for example, written a play, created a poster)?

☐ Ⓐ Never  
☐ Ⓑ Once  
☐ Ⓒ 2 or 3 times  
☐ Ⓓ 4 or 5 times  
☐ Ⓔ 6 or more times

VB345715

14. For school this year, how often have you been asked to write long answers to questions on tests or assignments that involved reading?

☐ Ⓐ Never  
☐ Ⓑ Once or twice this year  
☐ Ⓒ Once or twice a month  
☐ Ⓓ At least once a week

VB429518

15. When you have reading assignments in school, how often does your teacher give you time to read books you have chosen yourself?

☐ Ⓐ Never or hardly ever  
☐ Ⓑ Once or twice a month  
☐ Ⓒ Once or twice a week  
☐ Ⓓ Almost every day

**Questions 16–19.** The following questions ask about the subjects that you study in school this year.

VB345711

16. How often do you read paperbacks, softcover books, or magazines for **reading**?

☐ Ⓐ Never or hardly ever  
☐ Ⓑ A few times a year  
☐ Ⓒ Once or twice a month  
☐ Ⓓ At least once a week

VB345712

17. How often do you read paperbacks, softcover books, puzzle books, or magazines for **science**?

☐ Ⓐ Never or hardly ever  
☐ Ⓑ A few times a year  
☐ Ⓒ Once or twice a month  
☐ Ⓓ At least once a week

VB345713

18. How often do you read paperbacks, softcover books, or magazines for **social studies or history**?

☐ Ⓐ Never or hardly ever  
☐ Ⓑ A few times a year  
☐ Ⓒ Once or twice a month  
☐ Ⓓ At least once a week

VB345714

19. How often do you read paperbacks, softcover books, puzzle books, or magazines for **math**?

☐ Ⓐ Never or hardly ever

☐ Ⓑ A few times a year

☐ Ⓒ Once or twice a month

☐ Ⓓ At least once a week

VB595182

20. How hard was this test compared to most other tests you have taken this year in school?

☐ Ⓐ Easier than other tests

☐ Ⓑ About as hard as other tests

☐ Ⓒ Harder than other tests

☐ Ⓓ Much harder than other tests

VB595183

21. How hard did you try on this test compared to how hard you tried on most other tests you have taken this year in school?

☐ Ⓐ Not as hard as on other tests

☐ Ⓑ About as hard as other tests

☐ Ⓒ Harder than other tests

☐ Ⓓ Much harder than other tests

VB595184

22. How important was it to you to do well on this test?

☐ Ⓐ Not very important

☐ Ⓑ Somewhat important

☐ Ⓒ Important

☐ Ⓓ Very important



# STUDENT BACKGROUND QUESTIONNAIRE

## MATHEMATICS—GRADE 4

This section has 14 questions. Mark your answers in your booklet. Fill in only **one** oval for each question.

- VB525162
1. How often do you use a computer for math at school?

☐ (A) Never or hardly ever

☐ (B) Once every few weeks

☐ (C) About once a week

☐ (D) Two or three times a week

☐ (E) Every day or almost every day

For the following questions, think about all the times you do things for math. Include things you do at home, at school, or anywhere else.

- VB525164
2. Do you use a computer to type reports for math?

☐ (A) Yes

☐ (B) No

- VB525168
3. Do you use a computer to make charts or graphs for math?

☐ (A) Yes

☐ (B) No

- VB525166
4. Do you use a computer to practice or drill on math?

☐ (A) Yes

☐ (B) No

- VB525172
5. Do you use a computer to play math games?

☐ (A) Yes

☐ (B) No

- VB525169
6. Do you use a computer to e-mail your teacher about math?

☐ (A) Yes

☐ (B) No

- VB525170
7. Do you use the Internet to learn things about math?

☐ (A) Yes

☐ (B) No

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**GO ON TO THE NEXT PAGE** 



8. How often do you **use a calculator**?

VB525173

- ☐ Ⓐ Never or hardly ever
- ☐ Ⓑ Once in a while
- ☐ Ⓒ Almost every day

9. What kind of **calculator** do you normally use?

VB525174

- ☐ Ⓐ I don't have a calculator
- ☐ Ⓑ Regular calculator (addition, subtraction, multiplication, division)
- ☐ Ⓒ Graphing calculator

10. Have you ever used a graphing calculator?

VB525171

- ☐ Ⓐ Yes
- ☐ Ⓑ No
- ☐ Ⓒ I don't know what a graphing calculator is

11. When you take a math test or quiz, how often do you use a calculator?

VB525167

- ☐ Ⓐ Never
- ☐ Ⓑ Sometimes
- ☐ Ⓒ Always

12. How hard was this test compared to most other tests you have taken this year in school?

VB595182

- ☐ Ⓐ Easier than other tests
- ☐ Ⓑ About as hard as other tests
- ☐ Ⓒ Harder than other tests
- ☐ Ⓓ Much harder than other tests

13. How hard did you try on this test, compared to how hard you tried on most other tests you have taken this year in school?

VC034559

- ☐ Ⓐ Not as hard as on other tests
- ☐ Ⓑ About as hard as on other tests
- ☐ Ⓒ Harder than on other tests
- ☐ Ⓓ Much harder than on other tests

14. How important was it to you to do well on this test?

VB595184

- ☐ Ⓐ Not very important
- ☐ Ⓑ Somewhat important
- ☐ Ⓒ Important
- ☐ Ⓓ Very important



# STUDENT BACKGROUND QUESTIONNAIRE

## SCIENCE—GRADE 4

This section has 8 questions. Mark your answers in your booklet. Fill in only **one** oval for each question.

1. How much do you agree with the following statements? Fill in **one** oval on each line. HE002996

	Disagree	Not sure	Agree	
a. I like science.	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	HE002997
b. I am good at science.	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	HE002998
c. Science is useful for solving everyday problems.	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	HE003000
d. Science is boring.	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	HE003003

2. About how often do you study science in school? LC000144

- ☐ A Never
- ☐ B Less than once a week
- ☐ C 1 or 2 times a week
- ☐ D 3 or 4 times a week
- ☐ E Every day

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**GO ON TO THE NEXT PAGE** 

HE003005

3. Have you ever done hands-on activities or projects in school with any of the following? Fill in **all** ovals that apply.

- |   |                       |          |
|---|-----------------------|----------|
| a. Living things (for example, plants, animals, bacteria)               | <input type="radio"/> | HE003006 |
| b. Electricity (for example, batteries and flash bulbs)                 | <input type="radio"/> | HE003007 |
| c. Chemicals (for example, mixing or dissolving sugar or salt in water) | <input type="radio"/> | HE003008 |
| d. Rocks or minerals (for example, identifying types)                   | <input type="radio"/> | HE003009 |
| e. Magnifying glass or microscope (for looking at small things)         | <input type="radio"/> | HE003010 |
| f. Thermometer or barometer (for making measurements)                   | <input type="radio"/> | HE003011 |
| g. Simple machines (for example, pulleys and levers)                    | <input type="radio"/> | HE003012 |
| h. None of the above  | <input type="radio"/> | HE003013 |

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HE003014

4. When you study science in school, how often do you do each of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once or twice a month	Once or twice a week	Almost every day	
a. Read a science textbook	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	HE003015
b. Read a book or a magazine about science	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	HE003016
c. Discuss science in the news	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	HE003017
d. Work with other students on a science activity or project	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	WO001033
e. Give an oral science report	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	WO001034
f. Prepare a written science report	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	WO001035
g. Do hands-on activities in science	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	WO001036
h. Talk about the measurements and results from your hands-on activities	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	WO001037
i. Use a computer for science	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	WO001038
j. Take a science test or quiz	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	WO001039
k. Use library resources for science	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D	WO001040

QK070712

5. This year in school, how often have you been asked to write long answers to questions on tests or assignments for science?

- ☐ A Never
- ☐ B Once or twice this year
- ☐ C Once or twice a month
- ☐ D At least once a week

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VB595182

6. How hard was this test compared to most other tests you have taken this year in school?

- Ⓐ Easier than other tests
- Ⓑ About as hard as other tests
- Ⓒ Harder than other tests
- Ⓓ Much harder than other tests

VC034559

7. How hard did you try on this test compared to how hard you tried on most other tests you have taken this year in school?

- Ⓐ Not as hard as on other tests
- Ⓑ About as hard as on other tests
- Ⓒ Harder than on other tests
- Ⓓ Much harder than on other tests

VB595184

8. How important was it to you to do well on this test?

- Ⓐ Not very important
- Ⓑ Somewhat important
- Ⓒ Important
- Ⓓ Very important



# **NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS 2005 READING, MATHEMATICS, AND SCIENCE**

## **INFORMATION ABOUT NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS**

**PROJECT MISSION.** NAEP is administered by the U.S. Department of Education to report on the achievement of American students in key academic subjects. For more information about the NAEP program, visit the NAEP web site at <http://nces.ed.gov/nationsreportcard> or call 202-502-7420.

**PARTICIPATION.** States and districts that receive Title I funds are required to participate in biennial NAEP reading and mathematics assessments at grades 4 and 8. Teacher and student participation is always voluntary. Contact your school's NAEP coordinator for more information.

**NAEP CONTENT.** The National Assessment Governing Board (NAGB) develops frameworks detailing what students reasonably might be expected to know and do for each subject assessed by NAEP. For additional information on framework development, see the NAGB web site at <http://nagb.org>.

**SAMPLE NAEP QUESTIONS.** For each assessment, some of the test questions, along with performance data, are made available to the public to provide concrete samples of NAEP contents and results. For every assessment, NAEP distributes to participating schools demonstration booklets that provide more detailed information about the assessment design and questions. Released questions and student performance data may be viewed on and downloaded from the NCES web site at <http://nces.ed.gov/nationsreportcard/itmrls>.

**SECURE NAEP QUESTIONS.** On written request, adults may review NAEP questions and instruments still in use. These arrangements must be made in advance, and persons reviewing the assessment may not remove the booklets from the room, copy them, or take notes. Contact your school's NAEP coordinator for more information.

**NAEP REPORTS.** NAEP publications can be searched and downloaded from the NAEP web site at <http://nces.ed.gov/nationsreportcard>.

**FOR FURTHER INFORMATION.** For prompt field staff support on these or other matters, call the NAEP Help Desk at 800-283-6237.

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